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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,467	11/15/2001	Dale Lee Yones	DN1999117USA	1384

7590 11/02/2004
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EXAMINER

JENKINS, KIMBERLY YVETTE

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/980,467	Applicant(s) YONES, DALE LEE	
	Examiner Kimberly Jenkins	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2001.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-41 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 24-32 and 34-41 is/are rejected.
 7) ☒ Claim(s) 31, 33, and 39 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☒ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 60/134,398.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>15 November 2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the cancellation of claims 1-18 with claims 19-23 remaining. In addition, the Examiner acknowledges new claims and recognizes new claims 19-36 as disclosed within the Preliminary Amendment on pp. 3-6 of Application No. 09/980467 filed on November 15, 2001.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 19-23 are incomplete because they are dependent upon cancelled claim 18. Furthermore, claims 19-36 have not been re-numbered. The numbering of claims is not accordance with 37 CFR 1.126, which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). In turn, the following rejections correspond to re-numbered claims 24-41 (old claims 19-36).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 24 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. (US 5479172).

Regarding claims 24 and 35, Smith, who teaches a power supply and power enable circuit for an RFID transponder, teaches an RF transponder comprising a plurality of circuits, such as a power supply (via the antenna) for providing power and an input voltage (col. 3, line 62 – col. 4, line 5). In addition, Smith teaches one of the plurality of circuits comprising a Power-on Reset circuit PWREN (read as power enable circuit) for generating a reset signal for maintaining other ones of the plurality of circuits in an inoperative reset mode unless the power supply has sufficient power to ensure proper operation of the other ones of the circuits, the RF transponder characterized in that: at least one of the other ones of the plurality of circuits comprises control logic which, upon release of the reset signal, starts transmission of a data stream at a first bit of the data stream, in order to ensure a complete data stream (col. 4, lines 10-29).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25-30 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Urbas et al. (US 5252962).

Regarding claims 25 and 36, Smith teaches an RF transponder that includes a means for providing a reset signal (col. 5, lines 4-9). In addition, Smith teaches a delay after the reset

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signal is in an ON-state (power-up) (col. 10, lines 48-61); however, Smith does not disclose a flip-flop circuit for setting and clearing a state of a reset signal. Although it is known for one skilled in the art for flip-flop circuits, which alternate between states of high/low or on/off, to be interconnected with similar circuitry to form integrated circuits and microprocessor, Smith does not disclose the particular circuitry

However, Urbas, who teaches a system monitoring programmable implantable transponder, expressively discloses a transponder 200 (Fig. 2) that comprises flip-flop circuits 604, 614 and 654, etc. (Figs. 3A and 3B and col. 7, lines 42-46). In addition, the flip-flop circuits are used for resetting (col. 7, lines 22-26). Being that flip-flop circuits are essential regarding alternating states, such as for a reset signal, it would be have been obvious to one of ordinary skill in the art at the time the invention was made to include the flip-flop circuit of Yamamoto into the transponder circuitry of Smith, because Smith discloses a the reset signal as power-up and power-down (col. 10, lines 59-61 and Fig. 11), which is an indication of alternating states (flip-flop), and Urbas clearly disclose the flip-flop as resetting the signal.

Regarding claims 26 and 29-30, Smith teaches a flip-flop circuit for setting and clearing a state of the reset signal with the modifications of Urbas (seen above regarding claim 25 and 36). Smith also discloses a voltage divider in that which the voltage is compared to a reference voltage (col. 5, lines 49-51). The reset circuit, which is known to one skilled in the art to include a flip-flop circuit, enables the voltage limit circuit to the flip-flop circuit so that the flip-flop circuit sets the reset signal in response to the input voltage being less than or equal to a minimum sustaining voltage, and clears the reset signal in response to the input voltage being greater than the minimum sustaining voltage (col. 4, lines 11-24).

Regarding claims 27 and 37, Smith teaches an RF transponder characterized in that the minimum sustaining voltage has different values, in different transponder operating modes (col. 5, lines 37-41).

Regarding claims 28 and 38, Smith teaches an RF transponder characterized in that: in an active transponder operating mode, that derives power for the plurality of circuits from a battery (col. 2, lines 28-41); and a passive transponder operating mode that derives power for the plurality of circuits from an RF signal received by an antenna system (col. 1, lines 62-65).

5. Claims 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Murdoch (US 5701121).

Regarding claim 34, Smith discloses the aforementioned RF transponder wherein the Power-on Reset circuit comprising low current, comparators and Schmitt trigger inverters (col. 6, lines 51-67), and a voltage divider (col. 5, lines 49-51); however, Smith does not disclose on-chip high value poly resistances.

However, Murdoch, who teaches a transducer and interrogator device, expressively discloses the transponder as being encapsulated with a high impact resistance plastic (high value poly resistances) (col. 16, lines 64-65). Murdoch explains that it is common for all electronic components to be encapsulated in such materials; henceforth, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have to the transponder to have the circuitry to be with an high-impact polymer resistance as suggested by Murdoch to the transponder of Smith, because Smith discusses the components within the Power-On reset circuitry, whereas Murdoch discloses the material of which the circuitry is embedded, which is known to be cost effective for manufacturing.

6. Claims 32 and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Takeda (US 5589819).

Regarding claims 32 and 40-41, Smith teaches a transponder characterized by: a reset signal PWREN; and at least one logic element (col. 4, lines 62-64); however, Smith does not disclose an external reset signal.

However, Takeda, who teaches a transponder (tag) device, expressively discloses an external reset signal with the Power-on Reset-generated reset signal and forming a combined reset signal, wherein the combined reset signal is set in response to either the external reset signal or the Power-on Reset-generated reset signal being set, and the combined reset signal is cleared when the external reset signal and the Power-on Reset-generated reset signal are both clear (col. 5, lines 39-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to an external reset signal portion to enable one to manually reset the power of the tag as Takeda suggests into the tag of Smith, because Smith teaches an reset signal PWREN that is provided, whereas Takeda teaches an actual switch that enables a person to reset the power within the transponder.

Allowable Subject Matter

7. Claim 33 is objected to as being dependent upon a rejected base claim, because prior art of record did not meet the limitations of a transponder comprising a logic gate that is connected between ground and the input of the external reset signal. In turn, claim would be deemed allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 31 and 39 are objected to as being dependent upon a rejected base claim, because prior art of record does not expressively disclose an init delay circuit connected to a second

comparator which shares control of the flip-flop circuit with the voltage limit circuit, so that the flip-flop circuit holds the reset signal in all ON-state after the beginning of power-up for a longer one of a first period of time which is a delay time and a second period of time which is a time extended while the input voltage increases to greater than a minimum voltage.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Jenkins whose telephone number is 571.272.3064. The examiner can normally be reached from Monday - Friday between the hours of 7am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703.305.4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly Jenkins
Examiner
Art Unit 2635
20 October 2004

KJS

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
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